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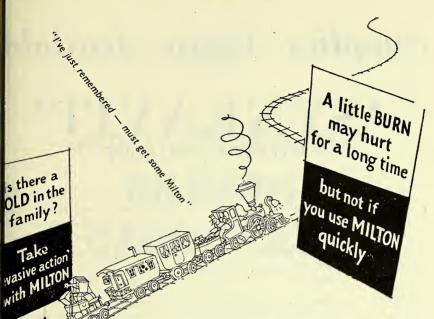
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Fig. 211

Fig 665.

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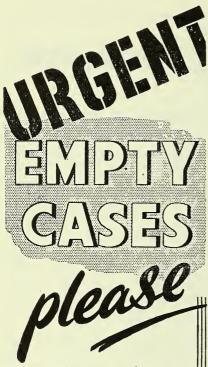
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	of 50 ,, .		••	• •		4/5½	2/8½	+ 5½	32/4	+	5/3
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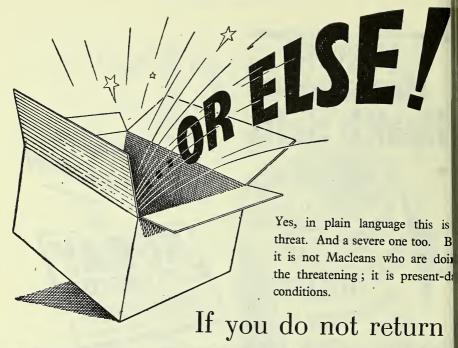
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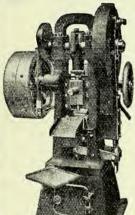
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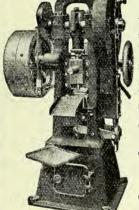
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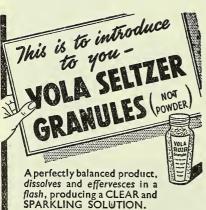
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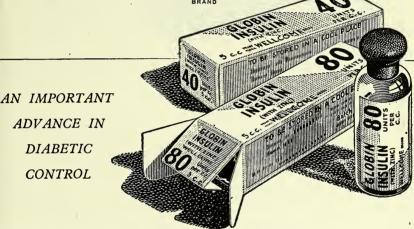


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NEWS OF THE WEEK

Company Law Reform.—A report has een issued by the Committee on Company aw Amendment and published as a White aper.

Remittances of Money to Italy.—The reasury announces that remittances may ow be made from this country to the whole I Italy with the exception of the district I Venezia Giulia.

Hints to Business Men.—An additional amphlet has been issued by the Department of Overseas Trade in the series "Hints o Business Men." It relates to Sweden. opies may be obtained on application to he Department at Hawkins House, Dolphin quare, London, S.W.I.

Statutory Committee.—The Statutory Committee of the Pharmaceutical Society vill meet at 36 York Place, Edinburgh, at I a.m. on July 25, to consider information and evidence from which it appears that I member of the Society was convicted of an offence under the Excise Permit Act, 1832, and Spirits Act, 1880.

Postal Packets to Sweden.—In addition to the postal services to Sweden listed in the C. & D., July 7, p. 1, packets weighing up to 4 lb. are accepted for transmission by surface mail. The special service to Sweden organised by the Ministry of Information is discontinued.

Licences for Anti-freeze Discontinued.—The Ministry of Supply has made the Control of Engine, etc., Anti-freeze (No. 3) (Revocation) Order, 1945, revoking the Control of Engine, etc., Anti-freeze Order (No. 1) of 1942 and (No. 2) of 1944. The Order came into force on July 16. Under it licences are no longer necessary for production, disposal and acquisition of anti-freeze material.

Air Mail to Czechoslovakia.—A postal service to Czechoslovakia, now in operation, is limited to air-mail letters and letter packets up to 2 oz. in weight and postcards. Air transmission is assured only to the extent that aircraft capacity is available after military priority requirements are met. Business and financial communications

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are restricted to ascertaining facts and exchanging information preparatory to resumption of trade so soon as conditions permit. Packets containing newspapers, printed matter, etc., up to 2 oz., are admissible by air mail but cannot be dispatched without a censorship permit. The air postage rates are: Letters and packets not exceeding I oz., 5d.; I-2 oz., 8d.; postcards, 2½d. Correspondence is not accepted for registration, insurance or express delivery. No money order or parcel post service is available.

Demand for Factories in Scotland.—Hillington Estate, Glasgow, favoured pre-war by many firms in industry as a suitable centre for the establishment of light industries, has now so long a waiting list that four more trading estates are being established on the same unit system. Three are in Lanarkshire and a fourth at Newhouse.

Association of British Chemical Manufacturers.—The council of the Association, at its July meeting, appointed Mr. J. Davidson Pratt, O.B.E., M.A., B.Sc., F.R.I.C., M.I.Chem.E. (previously general manager and secretary), as director and secretary. Messrs. R. Murdin Drake, O.B.E., M.Sc., and Allan J. Holden, B.Sc., F.R.I.C., who during the last five years have been assistant managers, have been appointed joint managers of the Association.

Contact with Scandinavian Scientists.—A visit to Denmark and Norway has recently been made by Professor A. V. Hill on behalf of the Royal Society. Professor Hill took with him the greetings of the Society to the academies of the two countries, together with copies of all publications of the Royal Society since 1940 and sums of money from a fund founded in memory of Sir Horace Darwin, and now donated to be spent in the acquisition of scientific instruments.

Medical Museum Donation.—At a meeting on July 12, the Council of the Royal College of Surgeons accepted a gift by the Wellcome Trustees of £80,000 towards the cost of extending the museum accommodation of the Royal College. It was decided to name one wing of the new building the Sir Henry Wellcome wing. In a letter from the chairman of the Trustees it was pointed out that Sir Henry Wellcome was an honorary Fellow of the Royal College of Surgeons.

Packaging for the Tropics.—At the request of the Anglo-American Packaging Committee of the Ministry of Production, the British Standards Institution has prepared and published a tropical packaging supplement to the British Standard Packaging Code. It is called Supplement No. 2 to B.S. 1133; a section of the supplement deals with medical and photographic equipment.

Equipment Auctioned for Hospital.—On the closing down recently of the Corporation of London Central Shelter Sick Bay, situated in the basement of No. 66 Cheapside, its medical equipment was disposed of for the benefit of St. Bartholomew's Hospital. The equipment had been in the first instance generously provided, free of all cost, by Evans Sons Lescher & Webb, Ltd. The whole equipment, comprising surgical instruments and sundries, and a certain amount of furniture, was disposed of at a private auction sale, which was attended by friends of the hospital, the result being that a sum of approximately £260 was made available for the funds of St. Bartholomew's.

London Pharmacy Degree Results.—The following were successful in the 1945 examinations for the London University Degree of Bachelor of Pharmacy: External, Cyril F. Abbott; Stewart S. Adams; Arnold Axon; Robert C. Carpenter, Harold W. Fowler; Roland Hardman; Joyce R. Hayter; William B. Hugo; Lewis J. E. Jones; Derek B. Lister; Douglas Metcalf; Douglas Metcalf; E. Locke; Joyce M. Page; John E. Pearson; Joan M. Rhodes; Hazel M. Searle; Clifford E. Eric C. Wilmshurst. Willis; Internal, William W. Binns; Alan Briggs; Alec L. Brown; Clarence L. J. Coles; Audrey H. Davies; Eva M. Dickinson; Nusyn Langwald; Pamela V. Reynolds.

South-east London Officers.-The Southeast London Chemists' Association held its thirty-third annual meeting on July 3, when the following officers were elected: Mr. R. C. Archer, *President* (re-elected); W. D. Gilman, Vice-president; Mr. E. Richardson, Treasurer; Mr. W. C. Spooner, Financial Secretary; Mr. F. H. Wallom, General Secretary, 137 Lewisham Way, New Cross, London, S.E.14. Mr. Archer said that the South-eastern district had received most of the enemy air activity, so attendance had been consequently low. He now hoped that the Association would go ahead again, and he looked forward to a year full of activity. The delegates to the Joint Conference on a Pharmaceutical Service gave their report, and all present agreed with the principles laid down, but pressed for a Pharmacy Board consisting entirely of chemists.

TOPICAL REFLECTIONS

Mobilisation for Export

Two words in your pointed editorial erticle "Exports the First Need" (p. 42) ook on a significant emphasis in my mind when I read them—the words "ruthlessly nobilised." The context refers to the total var production to which the country was committed in 1940, and makes the deduction hat equally decisive action in obtaining the primary conditions of prosperity is necessary now. But for the fact that this is a matter of concern to every man, woman and child n the United Kingdom I should not have made any addition to what you have so orcibly stated. Let us consider in simple erms how the case stands. In order to pay ts way, the country must export to an ncreased extent. In order to export, nanufacturers must have the requisite To these naterial for manufacturing. wo self-evident propositions may be added third: in order to manufacture, official ontrols must be relaxed with the utmost bracticable speed. The good ship Export, ving in dry dock in the region of Whitehall, hay find that numerous barnacles bred in hat quarter need scraping off: I can only ope that the process will be as ruthless as vas the mobilisation to which your article efers. The fact that you have been receivng for some weeks past "a steadily inreasing flow of inquiry from Empire and oreign buyers" for various kinds of goods llustrates the urgency of the situation. his is so essentially national a question hat bodies of the widest scope, such as the ederation of British Industries, are best ualified to bring pressure to bear where it vill be effectual.

Modern Dispensing

The opening article of a series on advanes in dispensing (p. 48) gives promise of a aluable survey. As the writer mentions, that may be called optimal dispensing was he subject of a symposium in your issue f March 25, 1944. That, as I indicated a reek later, was one of the best things of he kind I have ever read. The replies to he questions circulated by you were ufficiently numerous to represent a cross-ection of British pharmacy, and the fact hat on some points opinions differed was Il to the good. Your contributor in last reek's issue cites a report in the "Journal f the American Medical Association" eploring the inability of the average nedical practitioner in the United States o write prescriptions, and blaming teachers

for recommending "complex mixtures." Elaboration in prescribing is so contrary to present-day ideas that one would have thought the shot-gun type of prescription obsolete. On the question whether waitingrooms are necessary in pharmacies, your author is of opinion that they should in most cases be unnecessary. I sincerely hope so. To state only one objection, the provision of such a room would probably involve in many, perhaps in most, districts an extensive sweeping up of paper bags, nutshells and other disjecta membra at the end of the day. The number of customers waiting for medicine in a shop at any one time is normally limited by the fact that at busy periods the wait for each customer would be so lengthy that he or she must call again or make a special arrangement. With the writer's caution against piling up stocks above dispensary shelves I fully Anything calculated to harbour dust in that region is intolerable; moreover, the public can usually see all the top features of a shop, and in the case indicated would no doubt draw an unfavourable conclusion.

Favoured Scientists

Your brief report of the impressions of British scientists about their recent visit to Russia (p. 28) reinforces the view that co-operation with Soviet scientists is not merely possible but is necessary. In "The Times" of July 14, I read an amusing reference by Professor E. K. Rideal, president of the Society of Chemical Industry, to the respect paid to men of science in the Soviet Union. "It seemed that if one was the equivalent of a F.R.S. in Russia, he could get four rooms and many times the rations of the ordinary civilian. If he were merely a professor of science he could get two rooms and several times the rations. Our legislators might well follow the lead of Soviet authorities by recognising scientific eminence in some such manner. During the present housing shortage, discrimination along these lines would create a type of aristocrat not hitherto known here. Chairmen of the British Pharmaceutical Conference, who are usually learned men, might each receive a substantial dwellinghouse with three acres and a cow or the equivalent; while presidents of the Pharmaceutical Society, who are traditionally not quite so learned, might each have to be content with a modest cottage or a "flat-Xrayser

COMPANY NEWS

Woodlands Wax Products, Ltd. (P.C.).
—Capital £500. Manufacturers of and dealers in wax polishes, brushes, etc. Stanley Freeman Thompson, director. R.O.: 110 Fenchurch Street, London, E.C.3.

F. B. CHALMERS (CHEMISTS), LTD. (P.C.).—Capital £10,000. Chemists, druggists, etc. Franklin B. Chalmers, M.P.S., and Harold W. Woodward, M.P.S., directors. R.O.: 7 Windsor Road, Griffithstown, Monmouthshire.

Pesticide (D.D.T.), Ltd. (P.C.).—Capital £5,000. Manufacturers of and dealers in insecticides, vermin destroyers, etc. Major W. J. L. Williams and David Hayman, directors. R.O.: 11 Jubilee Place, King's Road, London, S.W.3.

Bureau of Abstracts.—Limited by guarantee without share capital. Objects: To take over the operations of the unincorporated Bureau of Chemical and Physiological Abstracts, founded in 1923; to act as a central bureau by the study, collation and dissemination by abstracts, indexes and records of chemical, physiological, medical, engineering, scientific and technological books, papers, brochures, patent specifications, etc. George M. Bennett, Frederick P. Dunn, Edwin B. Hughes and Ernest H. Rodd (appointed by the Chemical Society); Julian L. Baker, Herbert W. Cremer, Louis A. Jordan and Leslie H. Lampitt (appointed by the Society of Chemical Industry); Bryan A. McSwiney and Samson Wright (appointed by the Physiological Society of Great Britain and Ireland); and Frank G. Young (appointed by the Biochemical Society). R.O.: 6 Burlington Gardens, London, W.I.

ALLEN & NEALE (CHEMISTS), LTD., King's Lynn.—Mr. F. C. Bentley, M.P.S., has been appointed managing director.

A. & F. Pears, Ltd.—Profit for the year 1944 amounted to £134,687. Dividend on the ordinary shares has been set at 15 per cent., tax-free.

George Hull, Ltd., wholesale drysalters, Birmingham.—Mr. Harry H. Sewell has been appointed managing director. Mr. Sewell has been with the company for forty-four years.

Sangers, Ltd.—Profit for eleven months ended March 31 amounts to £224,590, against £272,779 in the previous year. A final dividend of 15 per cent. has been declared, making 25 per cent. (same).

Evans Sons Lescher & Webb, Ltd.—Directors' report for year ended Decembe 31, 1944, records a net profit of £22,917, to which is added balance brought forward from 1943 (£12,938), leaving available £35,855, which the directors propose to apply as follows: Transfer to reserve £7,500; 6-512 per cent. dividend on cumulative participating preference shares for year ended December 31, 1944, £7,873 8 per cent. dividend on ordinary shares £4,948; carried forward, £15,534. Messrs C. E. J. Sendall and C. E. M. Anderser offer themselves for re-election to the board

LEGAL REPORTS

Theft of Soft Paraffin.—At Leeds, or June 23, John Douglas Whittaker, White lock Street, assistant manager for a firm o transport contractors, was charged with stealing two drums containing 8 cwt. of sof paraffin belonging to his employers. Abraham Swerski, Chapeltown, and Victo Hutter, Roundhay Road, were charged with receiving the paraffin, knowing it to have been stolen. All were remanded on bail.

Powder Puffs Without Licence.—At Boy Street, London, police court, on July 12 Isaac Jack Levinson, described as an Arm deserter, was sentenced to two years imprisonment and ordered to pay fine totalling £24,074 for manufacturing sheep skin powder puffs (as handkerchiefs and containers) without a licence from the Board of Trade. The puffs were stated to have been made at Elgin Avenue, Maid Vale, and Southwick Mews, Paddington There were also charges of supplying then without coupons and fraudulently evading purchase tax. Guy Anthony Croxford, age twenty-three, Oxford Gardens, Kensington employed by him as selling agent, wa sentenced to eighteen months' imprison ment and fined a total of £5,689 for aidin and abetting, and being illegally in posses sion of 1,043 clothing coupons. Goods seized by the police were ordered to be confiscated Levinson was also sentenced to six months imprisonment, to run concurrently, fo stealing by finding another soldier's certifi cate of discharge from the Army. It wa said that, since deserting from the Army in 1942, Levinson's illicit trading had reached a turnover of £11,684. A detective sergeant said that Levinson had twice before been arrested for the offences bu had been released on producing the stoler discharge certificate.

TRADE NOTES

Patented Inhaler.—The apparatus described under the title "Novel Inhaler" C. & D., July 7, p. 8), and introduced by floore Medicinal Products, Ltd., 7 Bon Accord Square, Aberdeen, has been patented, and is being marketed under the registered rade name Deedon.

Agencies in India.—Applications are nvited by Calcutta Essence Supply Co., Julchand Mansion, Princess Street, Bombay, 2, India, from manufacturers in this cuntry of essences, essential oils, aromatic hemicals, etc., who are desirous of appointing an agent in India for the sale and disribution of their products.

Container Request.— Macleans, Ltd., Freat West Road, Brentford, Middlesex, ssue a warning to chemists that unless facleans cardboard containers are promptly eturned they will be unable to guarantee urther supplies of their preparations. Instructions on how to fold and dispatch he empty containers are given in an announcement in this issue.

New British Ventures.—Ashe Laboraories, Ltd., 120 Victoria Street, London, S.W.I, announce that they are now, for he first time in this country, able to offer upplies of biotin, in the form of ampoules ontaining 25 micrograms in one c.c. of terile distilled water. They are also dvertising for human hair sweepings and lippings for the purpose of cystine nanufacture.

Holiday Closing.—C. R. Crosskill & Sons, Calvert Works, Norwich, state that their vorks will be closed from August 4 to 13, and not as previously announced.—The works of the Winchester Manufacturers, I The Square, Isleworth, Middlesex, will be closed from August 4 until August 13.—The premises of Clinical Products, Ltd., Richmond, Surrey, will be closed from July 27 to August 7.

P.A.T.A. Price List.—The 1945–46 edition of the protected list and year-book of the Proprietary Articles Trade Association is now available. The year-book gives the annual report of the Association for 1945, nembers of the Council for 1945, a list of irms controlling articles included in the protected list, and of members of the whole-ale section, and the basic retail, standard wholesale and inclusive retail prices of the isted specialities.

Tenth Anniversary of Branded Vitamin.—To celebrate the completion of ten years of marketing Redoxon vitamin C, Roche Products, Ltd., have brought out a booklet entitled "Ten Years of Redoxon Vitamin C, 1934-44." The booklet, which comprises twenty-four pages of illustrations and text, covers the clinical indications, chemistry and history of vitamin C, and gives details of the packings and doses of the company's product. A copy will be sent to any chemist who sends in a penny stamp to comply with the paper regulations.

Enzymic Protein Hydrolysate.—A palatable form of enzymic protein hydrolysate has been produced by the joint enterprise of Genatosan, Ltd., Loughborough, and Bengers, Ltd., Holmes Chapel, Cheshire. Until recently, the bulk of the preparation has been used for famine treatment, but now ample supplies are available for conditions of amino-acid deficiency, whether due to lack of protein, metabolic disturbance or failure, such as the abnormal loss of protein through the kidneys, or extensive burns. The use of protein hydrolysate before and after operative procedure involving the metabolic tract offers a method of alimentation that avoids the use of solid food. Normally protein hydrolysate is administered orally in solution, with three times its weight of glucose, specially reinforced with vitamins B and C. A booklet dealing with the indications and methods of application for protein hydrolysates is available from the issuing firms.

Business Changes

Mr. J. W. H. Dew, F.R.S.A., chemical manufacturer, has removed to 53 Marloes Road, Kensington, London, W.8.

Allied Laboratories, Ltd., Park Lane, London, W.i, have centralised the distribution of their products under the direct control of the company. The step has been taken to ensure closer co-operation with retailers in view of the rapidly expanding demand for the company's preparations.

RETAIL LICENCE APPLICATION.—Alexander Fairbairn and W. H. Govan (trading as Richardson & Son) to reopen, at 214 Smithdown Road, Liverpool, 15, a business in drugs and medicines, medicinal and surgical appliances, etc., carried on at that address by Richardson & Son during the period December 1, 1940, to October 23, 1941.

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TRADE VISITORS

Mr. Adedapo Alfreds, Alban Pharmacy, 2 Victoria Street, Lagos, Nigeria, will be visiting the United Kingdom shortly to contact manufacturers and drug-trade exporters.

Mr. Lewis B. Feeney (Drogueria Franco-Inglisa, Riva Davia 2567–73, Buenos Aires, Argentina) is at present visiting this country to contact British manufacturers and develop the export of pharmaceutical products and drug-trade goods to the Argentine. Mr. Feeney's address while in Britain is Savoy Hotel, London, W.C.2.

Mr. Mark Lipworth (chairman, Alex. Lipworth, Ltd., wholesale chemists and druggists, Johannesburg, South Africa) is in England visiting the principals of the various companies represented by his company, and making contacts with British manufacturers who desire to introduce their products to the South African market. In an interview Mr. Lipworth expressed the opinion that "unless immediate steps are taken to encourage exports to South Africa, Great Britain will lose this valuable market." Mr. Lipworth's address while in England is c/o the Anglo-African Shipping Co. (S.A.), Ltd., I Throgmorton Street, London, E.C.2.

PERSONALITIES

Mr. H. P. HUTCHENS, M.P.S., 55 High Street, King's Lynn, has retired after forty years' service with Allen & Neale (Chemists), Ltd.

Professor Hermann Levy contributed a letter to "The Times" on July 9, in which he urged preventive action to forestall cartelisation in the quinine industry.

Mr. Charles Mackay, proprietor of the old-established business of Mackay & Son, chemists, Forster Square, Bradford, has retired. Mr. Mackay's father, the late Mr. Edward Mackay, first president of the Bradford and District Chemists' Association, acquired the business in 1878, and Mr. Charles Mackay has been sole proprietor since 1916.

MR. WALTER C. TATE, Ph.C. (proprietor of Tate's Medical Hall, Royal Avenue, Belfast), was invested with the chain of office as president of Belfast Rotary Club on July 2. The ceremony was carried out by the outgoing president (Mr. F. W. Purdy). Mr. Tate is a past-president of the Pharmaceutical Society of Northern Ireland, a member of Council, and a member of the Executive, Ulster Chemists' Association.

U.S. FATS POSITION

The United States Republican Congressional Food Supply Study Committee, a Republican-sponsored private committee investigating food shortages, submitted on June 20 a report on the fats position. The report makes the following points:—

A serious and critical situation with reference to fats and oils is now facing the American people. Fats and oils include such everyday commodities as lard, butter, shortening, soap, and many other household products. . . . The Department of Agriculture admits that there will be no relief from this intolerable situation until the late spring or summer of 1946. . . . The principal domestic sources of edible fats and oils have been lard, butter, cottonseed oil and peanut oil. Since the beginning of the war, soya-bean production has been stepped up many times to provide a substitute, but the yield has not been sufficient to make up the deficiency. Tallow has been used for both edible and non-edible purposes.

In normal times, the United States has been a net importing nation of fats and oils. Because the South Pacific supplies of copra, with the exception of a small amount from Ceylon, were cut off at the outset of the war, the country has been called upon to supply the United Nations with these highly important commodities. and the whole of Europe, according to reports reaching the Republican Congressional Food Study Committee, are undergoing a most critical shortage, and the United States is expected to secure and deliver fats, oils and soap badly needed to combat disease. Because the Federal food authorities failed at the outset, in the Committee's view, to co-ordinate domestic policy in building up supplies from every possible source, U.S. own stocks have been depleted to a low level in trying to meet foreign demands. Officials continue to commit the U.S. to furnish fats and oils, making the domestic situation still worse. According to Department of Agriculture statistics, butter production in 1945 will be about 23 per cent. less than in 1941; lard production, while about the same as 1941, will be 28 per cent. less than in 1944; edible tallow will be 16 per cent. less than in 1941; cottonseed oil 6 per cent. less; olive oil 50 per cent. less; and peanut oil will be 40 per cent. less than in 1941. Only corn oil and soya-bean oil will show increases over 1941, the former 11 per cent. and the latter 113 per cent.

DEATHS

.Acквиrn.—At Arncliffe, Half Edge », Eccles, on July 12, Mr. Albert ard Blackburn, Ph.C., aged eighty-two. Blackburn served his apprenticeship Mottershead & Co., 7 Exchange et, Manchester, with which firm his n e has been long associated. g ified as a pharmaceutical chemist in Towners (Messrs. Benger and Paine) h formed a company to develop Benger's fo and the other Benger specialities, and Blackburn assisted in this development director of the company. Under his corol Mottershead & Co. became one of tl leading pharmaceutical businesses in chester, and in 1939 he converted it ir a limited company. He was well known fonis work in connexion with hospitals in chester and Salford. He was honorary a checary to the Manchester Royal Infirm-Salford Royal, St. Mary's and Eccles Bericroft hospitals. He served on the gerning committee of the Manchester and S ord Medical Charities, and was viceplident of the Manchester Chamber of The. For many years he was a member ouncil of the Manchester Pharmaceutical

pany, pharmacy was represented by srs. A. Ashcroft, W. E. Phillipson ild of Public Pharmacists) and T. Miller nchester Association and Branch).

beciation, and he had also filled the office ice-president. The funeral service took

le at St. Paul's Church, Kersal, on 7 14. In addition to the staff of the

ARR.—On June 27, Mr. Percy Carr, S., 87 Ecclesall Road, Sheffield, aged ty-three.

oupland.—Mr. E. V. Thomas (general pager, Pharmaceutical Specialities (May Baker), Ltd., Dagenham, writes:—

feel sure his many friends would appreciate e slight amplification of the information tained in your obituary notice of Henry S. pland (see C. & D., June 23, p. 636). Born numble parents in a Lincolnshire village, rry Coupland was educated at Queen Elizan Grammar School, Alford. He was apprend to Mr. Harold Wyatt, Liverpool, from e passing his Minor examination in 1893. It spending a short time with Squire & S, Oxford Street, London, he passed the or examination in 1897, and the following r was appointed laboratory manager to igkinson, Clark & Ward, Whitecross Street don, where he stayed for eight years. At stage in his career he took his B.Sc., London, ree, and joined Brady & Martin, Newcastle-Tyne, as manager of their laboratory, mately becoming an assistant director. In

1916 he was appointed consultant chemist to the War Office, and, on being demobilised, joined May & Baker, Ltd., where he remained until he retired at the age of seventy. In his work with Messrs. May & Baker, as in all previous appointments he held, Henry Coupland proved to be an unqualified success. His keenness for his work, his conscientiousness in all he undertook, and his enthusiasm in keeping his very special knowledge up to date, were a source of inspiration to all those with whom he came in contact. Henry Coupland's death at the age of seventy-four has removed from the ranks of the profession a distinguished person whose charm of manner, sympathetic nature, and unfailing courtesy and modesty gained him the esteem and affection of all who knew him.

Hardy.—At Torquay, suddenly, on July 14, Mr. Charles T. Hardy, a director of Arthur Berton, Ltd., 256 Old Street, London, E.C.I. Mr. Hardy retired from active directorship in 1943, owing to ill-health, after twenty-three years as sales director.

HUGHES.—On June 24, Mr. Joshua Arthur Hughes, Ph.C., Abercarn, Monmouthshire, aged seventy-four.

SMITH.—At 7 Kirklee Quadrant, Glasgow, W.2, on July 8, Mr. James Hunter Smith, M.P.S., 8 Glassford Street, Glasgow. Mr. Smith qualified in 1903.

WILLS

Mr. Dennis William Andrew Desmond, M.P.S., 57 Warwick Road, Bishop's Stortford, Herts, and 55 Freemasons Road, London, E.16, left £28,452, with net personalty £27,401.

Mr. Frederick Arthur Flint, Bundoran, Park Hill Road, Otford, near Sevenoaks, Kent, formerly a director of the British Essence Co., Ltd., left £4,975, with net personalty £3,496.

MR. DOUGLAS ARCHIBALD MACCALLUM, F.R.I.C., F.C.S., 95 Fotheringay Road, Glasgow, a past-president of the Society of Chemical Industry, left personal estate in Great Britain valued at £1,216.

Mr. Ernest Harold Ellis, 47 Blenheim Chase, Leigh-on-Sea, Essex, formerly secretary of the General Apothecaries' Co., Ltd., London, who died on March 17, left £1,092, with net personalty £534.

MISS CATHERINE CARRON SIME, M.P.S., the Congregational Manse, Hallgate, Cottingham, Yorks (a manager for Selles Dispensing Chemists, Ltd., for fifteen years), left £5,032, with net personalty £4,907.

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NORTH BRITISH BRANCH ANNUAL MEETIN

THE annual meeting of members of the Pharmaceutical Society resident in Scotland was held in Edinburgh on June 27, Mr. John Anderson in the chair.

Chairman's Statement

The Chairman said he had attended the annual meeting of the Society in London. He found that they suffered in England, as in Scotland, from lack of interest on the part of members. It was proper to recognise that they were meeting that year under much happier conditions than a year The cessation of actual fighting in Europe had hastened the termination of the nightmare years, and they in Scotland recognised that their English brethren had had a much worse time. It was right that they should take note of the part that pharmacy and pharmacists had played throughout the war years, and were still playing. Even those who were not in uniform but in overalls had no reason to be ashamed of the part they had taken. Advancing years, diminishing stocks and reduced staffs had not made things easier, but they had managed to discharge what was, after all, their primary duty as pharmacists, that is, they had kept faith with the public and kept an adequate pharmaceutical service going. Out of the approximate 5,000 pharmacists serving in the Forces in one capacity or another Scotland had given a fair quota. He personally, and possibly some of the rest, had had opportunities of welcoming repatriated prisoners, and it was good to know that through the War Aid Fund, by means of a regular supply of parcels and books, they were able to lessen the tedium endured by such prisoners. They must not forget that in the approximate number of casualties-some 150—there were members from their own branches—young men for whom there would be no "September shadows." They must not be forgotten, and he would deem it a worth-while gesture if, at the proper time, some simple token could be installed in that Scottish home of pharmacy to remind them of those men.

Points that came up at the previous annual meeting had been considered, but it had been deemed inadvisable to take any action in connexion with them.

The Scottish Central War Committee had carried through a tremendous amount of work. They had also got through a great deal of work in connexion with the health services, and members of the Scot-

tish Committee who had acted as lia the on officers had been in London freque of the Bill was not yet before the Ho but when they saw the structure of Bill he was sure that very much woul atternations. gained for pharmacy.

Scottish Position Not Appreciated

Mr. Teesdale said he would like to one or two questions. The matter interested them most at the present was the National Health Service. had received the Scottish note on the W Paper in September, and in Edinby Mr. Linstead and Mr. Wells had addre branch meetings. Both of these gentle seemed reluctant to discuss remunerations and to think that England would be ple with the present Scottish with the present Scottish rates. They appeared to lack knowledge of and to to appreciate the position of pharmac Scotland. He would like an assurance they were not letting the national comm get away with this attitude. He would like to know what the findings of Committees were on the question of muneration and terms of service.

THE CHAIRMAN said he thought Teesdale had come to a wrong concluin regard to Mr. Linstead and Mr. W He could assure Mr. Teesdale that Scottish Committee was keeping a car eye on all the proceedings. Nothing m could be done about remuneration until Bill came before the House. There wa question of slavishly following Engla lead. Neither would they dare to ask t Scottish colleagues to maintain the st quo when coming into changed condit where private dispensing would be a matically transferred to insurance. agreed with Mr. Teesdale that Eng pharmacists were not quite conver-with conditions in Scotland, but Scottish committee would see to it the remuneration would be something would be acceptable to Scottish chem in general. The line of approach had yet been considered, but the matter in the hands of men who were not with ability and who were not unaccustomed dealing with Government departments.

Subcommittee's Findings Demanded

Mr. Teeesdale then asked the chairr if he could give a summary of the finding the subcommittee of the Executive pointed to consider the Committee

iry's report, as nothing had been I of this.

the CHAIRMAN said that he must admit the committee had done little during past session. This was due to the that they were struggling along through var years, and had really more importmatters to take up their attention. Teesdale could rest assured that the

er was not lost sight of.

c. TEESDALE said he had, at previous al meetings, elaborated points about or place of meeting which he thought dencourage members to attend. He ght the Executive should appoint abcommittee to consider ways and is of securing a better attendance. He dalso suggest that a Scottish Branch esentatives' meeting should be held, injunction with the annual meeting, hould enable them to discuss subpeculiar to Scotland.

d for the Future

IE CHAIRMAN said they had sympacally considered Mr. Teesdale's sugon of change of hour. It had been the however, that in the South an noon meeting had been tried with no success, and they had reverted to the noon meeting. When they had reached normal times, with better travelling ties, they might reconsider the question of a where but when to hold annual meeting. The suggestion of a tish Branch Representatives' meeting, nought, was a good one and would be note of for the future.

R. TEESDALE asked whether the Execuwas in agreement with the opinion ied in the provisional statement on th services to the effect that a member ing only the chemist and druggist ification was not able to perform the cs of a pharmacist in a hospital or th centre. He did not think it was a cct statement. There was considerable ussion on this point, Dr. Tait and srs. Jack, McDonald and Meldrum

ng part.

HE CHAIRMAN said he hoped more ng people would, like Mr. Teesdale, an interest in pharmaceutical matters. lid not see why Mr. Teesdale should not some of his confrères into the ranks and ire them with the enthusiasm which had for pharmacy.

itineers' Report

hree thousand and sixty-one nominapapers were issued by the resident

secretary on May 11. The nomination papers returned showed that forty-five members had been nominated, of whom a total of thirty-four signified their willingness to act if elected. These were Messrs. John Anderson, Dundee; John Melvin Anderson, Glasgow; Baillie, Glasgow; William Andrew Beattie, Edinburgh: Frederick W. Moncrieff Bennett, Arbroath; Charles Alexander Buick, Port Glasgow; Colin Campbell, Glasgow; Charles Coutts, Aberdeen; Robert James. Cowie, Aberdeen; Hugh Spence Culbert, Dumfries; William Spence Culbert, Air-Glasgow, Currie. David Charles Grav Drummond, Edinburgh; Andrew Brown Gilmour, Glasgow, W.2; Thomas Guthrie, Glasgow; James Jack, Arbroath; David Kerr, Edinburgh; George Thomas Lamb, Montrose; Robert McAdam, Glasgow, W.4; John Bayne McDonald, Perth; Alexander McIntyre McKellar, Dalmuir; Thomas McKenzie, Inverness; Dalmuir; William Mair, Edinburgh; Elizabeth Miller, Glasgow; Thomas Campbell Miller, Dunfermline; James Robertson Milne, Dundee; Alexander Murray, Glasgow; Archibald Robertson, Hamilton; Hunter Tainsh, Edinburgh; James Teesdale, Edinburgh; Hugh Williams Thomas, Glasgow; John Walker, Glasgow; John Glasgow; James Montgomery Williamson, Glasgow. 3050 papers were issued; 717 were returned (ten informal).

Result of the Poll

The following is the result of the poll:—

The following i	is the	resurt	OI	the por	
BENNETT, F. W.	M.				425
GILMOUR, Andrey	v Brov	vn			414
DRUMMOND, Cha	rles Gr	ay			408
ANDERSON, John					400
MACKENZIE, Tho					400
GUTHRIE, Thoma	S				392
BEATTIE, William	Andr	ew			365
CULBERT, Willian	n S.				359
COWIE, Robert Jan					352
MILNE, James Rob					352
McADAM, Robert					338
LAMB, George Tho					333
COUTTS, Charles					331
MACDONALD, Joh	ın Bay	ne			323
MILLER, T. C.					306
MAIR, William					287
MURRAY, Alexand	ler				277
TAINSH, John Hur	ıter				276
CULBERT, H. S.					272
Buick, Charles					269
Currie, David					259
Jack, James					250
Robertson, Archi	bald				235
MILLER, Elizabeth					227
Kerr, David					210
Teesdale, James					199
Campbell, Colin					197

Weir, John	 	 183
Anderson, J. M	 	 180
Thomas, Hugh Williams	 	 170
McKellar, Alexander M.	 	 149
WILLIAMSON, James M.	 	 149
Baillie, Frederick	 	
WALKER, John	 	 •

THE CHAIRMAN then declared that the first eighteen of those on the above list, together with the president of the Society (Mr. J. C. Young, London), vice-president (Mr. G. R. K. Mawer, Wrexham), and Mr. Adam Alexander Meldrum, Aberdeen, as ex-officio members, would constitute the Executive of the North British Branch for the year 1945-46.

Meeting of Executive

A meeting of the Executive of the Bra was held on June 27, Mr. John Ander in the chair. The Resident Secret. The Resident Secret. The Mr. Robert McAdam, tendering his resignation as secretary of the Glasgow and Souwestern Scottish Branch. It was agree that all unexhausted remits should submitted to the new Executive. Chairman intimated that the scrutine report and relative papers were all in order.

On the motion of Captain Eric Kno seconded by Mr. Teesdale, the report adopted.

BRITISH HERB CROP REPORTS

J. W. Seymour, Ltd.—The PEPPERMINT is rather patchy owing to lack of rain, but with a good shower in the near future should be a reasonably good crop. DILL looks extremely well.

Perks & Llewellyn.—LAVENDER.—Some of the lavender is already in bloom, but most of the crop has been set back by the late frosts and will not be ready to cut for distilling for another month. There is every prospect of a good harvest.

Bruce, Starke & Co., Ltd.—Chamomile.

—This is a little late this year, but has benefited greatly by the amount of rain we have had from time to time during the past month or two. The plants are looking well and healthy, and we anticipate a first-class yield. Lavender.—The crop is looking well and, provided we get a fair amount of sunshine, we anticipate the yield will be at least up to normal. Peppermint.—The plants are looking well and healthy. Angelica.—We had only a reduced acreage this season; the oil distilled, however, was of excellent quality, and showed an average yield.

Potter & Clarke, Ltd.—Parsley Piert.— Very scarce owing to the dry spring and lack of collectors. Clivers.—Proving very plentiful and apparently extremely healthy. Dandelion leaves.—Very short again owing to the lack of collectors. Burdock Leaves.—Fairly good. Also Nettles and EYEBRIGHT, WOOD SANICLE Mugwort. and Coltsfoot.—These crops are fairly good. Comfrey Herb.—Fairly good, but more could be collected if herb collectors were available. Wood sage, Avens and Centaury.—These herbs will be very scarce. Meadowsweet.—Appears to be plentiful this year and of good quality, but shorter

in length. AGRIMONY .- This herb low attice promising, but will be short in supply ow to the ploughed-up land. MOTHERWO Rue, Hyssop and Southernwood.—The of course, are cultivated herbs. Those wh have stood the winter are very good, I am owing to the very sharp frosts during winter months many have been killed Horehound.—Is very scarce owing to bad germination of seed. Parsley Looks very promising. MINT.—There v not be any mint available this season owl to the War Agricultural Executive Co mittee's issuing instructions that it show be ploughed up—the suggestion being the mint is a luxury and can easily be dispens with in war-time. SAGE.—The winter sa is very scarce and gappy. The autumn sa looks promising, but as seed is so scal it will be very difficult to obtain. THYME! A fairly good crop, but as it is a ve expensive herb to grow, it will not be ve plentiful this season. Haws.—Quite pl mising where not ruined by the May fros

The Herb Farm, Ltd.—Culinary Heri Owing to the plentiful rain, culina herb crops are in excellent condition. T bad frosts caused a certain set-back as the loss of a small proportion of the plan SAGE is still short, owing to an outbre of verticillium two years ago, but t MARJORAM and THYME crops are partic larly good. LAVENDER and CHAMOMI look very promising, and the lavend acreage is again being gradually increase The frost killed most of the primary flowe so that the harvest may be rather lat Drug crops are only in small lots, ar mainly for seed and fresh extract purpose A small but constant demand for out-of-th ordinary medicinal seeds comes from overseas.

MEDICAL ASPECTS OF BRITISH COUNCIL ACTIVITIES

A REPORT on the work of the medical department of the British Council, which celebrates this month the tenth anniversary of its inauguration, demonstrates what can be done by a live Government organisation whose object is to foster British interests abroad. For example, the department publishes its own "British Medical publishes its Bulletin," now in its third year, at approximately monthly intervals. In this publication are included original articles, abstracts, book reviews and contents lists of current British medical and cognate journals. There are editions in English, French, Spanish, Portuguese and Turkish, and it has even been found possible to reprint the English edition in Stockholm, Sweden, by sending matrices of the type. A warning is given, however, that while it is possible that new languages will ultimately be added, such additions cannot lightly be undertaken. Few not directly concerned with such work can appreciate the magnitude of the task of producing and printing a technical periodical in foreign languages. Scientific nomenclature is often unstable, and it may be necessary to make an arbitrary choice from several forms. Great vigilance is also needed to guard against errors of translation or printing.

In addition to circulating the Bulletin, the Department meets numerous requests for copies of medical papers (reprints or photostats), bibliographies, and information on a variety of medical subjects, and arranges exchanges between British and foreign medical journals and the supply of British medical books and journals to overseas medical libraries. From these ervices arise requests for small supplies of new drugs for research purposes, and for new or improved types of medical instruments and apparatus of British manufac-Wherever possible the department meets these requests, obtaining samples of drugs, sometimes even before they are commercially available, In special circumstances it acts as intermediary for the purchase of equipment and apparatus by verseas medical men and institutes, and as an agent for the supply to foreign aboratories of standard bacterial cultures,

A start has been made on a programme of production of medical films, with commenaries in several languages, intended primirily for overseas medical audiences. A small committee views existing medical ilms, most of which are amateur 16-mm.

productions made by surgeons and others interested in the application of cinematography to medical teaching. comments on such films are sent abroad, and in some instances requests for prints are received from foreign medical teachers. Medical visitors come to this country sometimes as the guests of the Council, and sometimes at their own expense. In both circumstances programmes are arranged for them in consultation with suitable experts professional organisations. abroad by distinguished British medical men are also sponsored by the Council. The department is a unit of the science department, and is advised by a science committee under the chairmanship of Sir Henry Dale.

PROPRIETARIES IN FRANCE

French pharmacists have agreed to continued control of proprietary medicines. The control was instituted in the first place by the Vichy Government, and the chemists' decision is taken despite the fact that full liberty has been restored to them since the liberation. The control is exercised by a technical committee set up by the Ministry of Public Health, and having as its members several professors of medicine and pharmacy, a Government representative, and a representative of the manufac-New proprietary medicines are submitted to the committee for examination, with a description of the method of manufacture. If the preparation is passed by the committee it is given a number and allowed to be sold. Existing medicines are In many instances the also submitted. committee has expressed dissatisfaction and informed the manufacturer that his method of preparation must be altered or the medicine will have to be rejected. advertisements must be submitted to the committee, which exercises a control over the wording. No medicine may claim to cure an illness; no advertisement is allowed to make claims that cannot be substantiated; and there is also a movement by certain members of the Faculty to put a stop to all advertising, except in scientific journals. This is believed unlikely to succeed.

"C. & D." Dispensing Price List.—The column headings under "dispensing price" in the list of price changes published last week (p. 30) should have read 4 oz., I oz. and I dr., respectively, and not as stated.

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NO. 3415

Conference Chairman's Address

The second annual address of Mr. H. Brindle from the chair of the British Pharmaceutical Conference confirms his reputation as an expert in the training of pharmaceutical students. Last year, it may be recalled, he discussed prospective changes n the curriculum, including in his purview the report of the Norwood Committee, the Education Bill (now an Act of Parliament), and the Pharmaceutical Society's Committee of Inquiry set up in 1937. difficulty of finding a suitable time for apprenticeship was demonstrated, and the desirability of serving it after qualification was urged. This year, as our abstract of his address (pp. 68-72) shows, Mr. Brindle has, so to speak, added a wing to last year's structure. The two styles of architecture harmonise well. The chairman has set forth in detail the differences between chemistry in general and pharmaceutical chemistry in particular, as taught in universities on the one hand and in schools of pharmacy on the other.

Points of Special Interest

This kind of address, with its closely knit sequence of thought, does not require a formal analysis. We may, however, select three points for special mention. The first point is the attention paid to practical work in university courses in chemistry,

beginning at an early stage in training:-

"An error of 0.2 per cent. may make all the difference between the acceptance or rejection of a large amount of valuable material, and the analytical processes must be practised until a very high degree of accuracy has been gained. He [the student] must be able to determine whether a chemical contains five or seven parts per million of lead or two or three parts per million of arsenic. In the second year . . this specialisation in analytical methods is still more emphasised."

Supplementary Courses

The second point is the benefit of supplementary courses following the attainment of a degree or diploma:—

"Modern universities can also offer diplomas, degrees, or training in chemical engineering, bacteriology, pharmacology, botany, etc., which can be taken with advantage by the student who intends to devote himself to some aspect of pharmaceutical chemistry. With careful planning on the part of the teacher, and hard work on the part of the student, an academic qualification in one of these subjects should not require more than one year, in addition to the ordinary pharmacy course."

The attraction for an ambitious student of thus adding a second string to his bow at a comparatively small cost needs little stressing: those who have adopted this plan are, we believe, unanimous in their approval of it. The third point is a comparison of post-graduate research in a university with post-graduate research in industry, and holds the balance fairly between them. The mental process of the experimenter, the chairman remarks,

"is the same whether the research is carried out in the laboratory of an industrial firm, or a university, or on the working bench of a pharmaceutical dispensary. Some differences in the kind of work carried out are liable to creep in, governed by such factors as the freedom which is the most treasured possession of the scientist in academic life, as opposed to direction and restriction by

circumstances, or from the management. . . . Excellent work of the greatest service to humanity has been produced under both conditions "

As we pointed out a year ago, Mr. Brindle then emphasised the value of a university education in training a student "in such a way as to enable him to train himself" and in teaching him to think "along right lines." Our universities are the power-houses of the intellectual life of the country, and there is a growing consensus of opinion that they should be made available for every student who can profit by them. cramming of students known at some schools a generation or more ago was apt to result, unless the recipients were fully alert, in what may be called a "utility" education. While not claiming for a university training in pharmaceutical subjects an immeasurable superiority to the corresponding training in schools or colleges, we may point out that it sets a standard.

One matter that universities and independent institutions alike need to keep before them is the balancing of the curriculum so as to avoid overloading their students. A comparison of the Pharmaceutical Society's educational requirements of twenty-five years ago with those of the present day shows some notable additions without, so far as we can see, a corresponding adjustment of the load of knowledge that candidates are judged capable of carrying. It should be borne in mind that all excess in this burden tends to produce some degree of cramming. Mr. Brindle's remarks on the desirability of the Pharmaceutical Society's extending grants to other educational bodies and his further proposals on apprenticeship will no doubt receive consideration in the appropriate quarter. In commending his address to the attention of our readers, we may note its implicit recognition of the discipline essential in all scientific work.

Coupons for Powder Puffs

The report of a legal action given on p. 56 of this week's issue directs attention to the necessity of demanding coupons from customers for handkerchief powder puffs, even if the goods in question have been purchased coupon-free as a result of the supplier

failing to collect coupons from the retailer. After taking the appropriate coupons the retailer must surrender them to the coupon-collection department of the Board of Trade. A quarter of a coupon is required where the handkerchief of the puff does not exceed one square foot; above that measurement the coupon value is one-half.

Relief for Wife's Earned Income

A MATTER of practical interest to many traders whose wives help in the conduct of the business concerns the additional personal allowance the husband can claim, provided certain conditions are complied with. The authority is Section 18 (2) of the Finance Act, 1920 (as amended), which provides that:—

If the total income of the claimant includes any earned income of his wife the deduction to be allowed under this section (i.e. the personal allowance) shall be increased by an amount equal to nine-tenths of the amount of that earned income but not exceeding, in any case, f80.

The right is dependent on the wife's being in receipt of earned income. If such income is included in the husband's return there is, in effect, total immunity from tax liability on it, up to £89 (because the one-tenth earned income allowance is given first of all, along with that on the husband's earned income. That leaves £80, which is the maximum amount of additional personal relief to be given to the husband). Where the wife's earnings are less than £89 a year, relief is limited to the lower figure. If they are more than £89, the greatest relief obtainable is one-tenth of the earned income, plus £80.

The earned income of the wife mentioned in the quotation from the Finance Act, 1920, need not come in from her employment in the service of an outside party, but may be income received by her from service in her husband's business, trade, or profession. It must, however, be bona-fide service. A book entry unsupported by actual payment does not suffice to entitle the taxpayer to the additional relief. Wages or salary must be paid, and an entry in the books of account is desirable, though not absolutely essential if proof of payment should be called for.

arce and Less-scarce Drugs

1 oughout the years of the war in Europe it as been necessary to announce from the to time restrictions on the use of an ain drugs as a measure of conservation outpolies. While it cannot yet be claimed

the supply position of drugs has n ceably improved, it is noteworthy that Ministry of Health has apparently fold it possible to go a short way along road to more normal conditions. The o ial announcement on p. 73 that the Sice Substances Order, 1941, is to be re-ked, and the Scarce Substances Order, , is to be substantially amended, sald be carefully noted by pharmacists w will be unable, after November 1, to u "authorised alternatives" for a conrable number of commonly prescribed a cles. For example, the four principal ssium salts (bicarbonate, bromide, citand iodide) will no longer be "scarce

substances" and will have to be supplied when ordered. Similar conditions will apply to many spirits and tinctures included in the schedule to the 1942 Order (the exceptions are given in the official notice), necessitating, in some instances, a considerable capital outlay for the purchase of fresh supplies. It is pointed out that as ten of the "authorised alternatives" named in the 1942 Order, but omitted in the new Order, will still be usable in N.W.F. formulas, chemists will have a good opportunity of using up their stocks of some of the "authorised alternatives," but for prescriptions other than N.W.F. original preparations will have to be supplied. It would be wise, therefore, for pharmacists to go through their stocks of the substances affected (see table below) without delay so that they will not be left with useless galenicals on November 1. when the new Order comes into operation.

Article			Position on November 1, 1945
actum ipecacuanhæ liquidum			Remains "scarce substance"
sum gentianæ compositum concentratum	• •	• • •	ditto
sum gentianæ compositum recens	• • •	٠. ا	ditto
ssii bicarbonas	• • •		No longer "scarce substance"
ssii bromidum	• • •		ditto
ssii citras			ditto
ssii iodidum			ditto
tus ætheris nitrosi			ditto
tus ammoniæ aromaticus			Remains "scarce substance"
tus chloroformi			ditto
tus menthæ piperitæ			ditto
tura aurantii			ditto
tura belladonnæ			No longer "scarce substance"
tura calumbæ·			ditto
tura capsici			Remains "scarce substance"
tura cardamomi composita			No longer "scarce substance"
tura cinchonæ			ditto
tura cinchonæ composita			ditto
tura colchici			ditto
tura gentianæ composita			ditto
tura hyoscyami			ditto
tura ipecacuanhæ			Remains "scarce substance"
tura limonis			. ditto
tura lobeliæ ætherea			No longer "scarce substance"
tura nucis vomicæ			ditto
tura opii camphorata			ditto
tura quassiæ			ditto
tura quillaiæ			ditto
tura scillæ			. ditto
tura senegæ			ditto
tura stramonii			ditto
tura tolutana			ditto
tura valerianæ ammoniata			ditto
tura zingiberis mitis			Remains "scarce substance"

PHARMACEUTICAL CHEMISTRY—WHENCE AND WHITHER?

Abstract of the address given by the Chairman of the British Pharmaceutical Conferen (Mr. H. Brindle, B.Sc., Ph.C., F.R.I.C.) at the Conference annual meeting in London, July 1

WE, who are pharmacists, know in a general way what we mean by pharmaceutical chemistry. When, however, we attempt a precise definition, difficulties arise, and I, at least, have derived no help from books of reference. One almost begins to wonder if pharmaceutical chemistry has really a concrete existence. Yet students of the history of chemistry will agree that in days

not long passed all chemistry was pharmaceutical chemistry and all chemists were pharmaceutical chemists. Some two centuries ago chemistry began to emerge as a socalled pure science, whatever that term may mean, and in the course of years the lusty child has vastly outgrown its parent. As usually happens in a family, at first the child was largely dependent upon the parent, but in the later days the parent derives more and more help and encouragement from his descendant.

The alchemists were really neither chemists nor apothecaries. They added very little to know-

ledge of chemistry, and were followed about the tenth century by the iatromedical chemists, who should be considered as the first pharmaceutical chemists. All who practised chemistry at this time were interested in the subject from the medical, i.e. the pharmaceutical, point of view. Their main aim was to prepare chemical substances for use in medicine, and their interest in chemistry as a science was distinctly secondary. Nevertheless, in the main they were the only chemists of the time, and chemistry was pharmaceutical chemistry, and continued to be so for centuries. I am not going to refer to the discoveries of these workers; the mere enumeration of their names is sufficient to kindle a feeling of pride in the heart of the present-day pharmaceutical chemist. Paracelsus, who lived in the first half of the sixteenth century, was followed by such as van Helmont, Agricola, Glauber, Scheele, Kunkel, Davey, Berzelius, Liebig, Wohler and Dumas, to name a few only who spent periods of their life as apothecaries, a pharmaceutical chemistry can justly clathem. John Dalton was one of the finon-apothecaries to teach pharmaceutic chemistry. Chemistry was becomisufficiently important to be studied a practised apart from medicine. In 18 the Pharmaceutical Society of Gre Britain and the Chemical Society we

founded. It is significa as indicating the tre of the ideas of the til that these two ever synchronised, but pha maceutical chemists we still the pioneers, as the following year t newly founded Pharm ceutical Society esta its lished School Pharmacy. The practic chemistry laborator which was instituted part of the school, w possibly the first we equipped laboratory be established in the country for the teachi of practical chemistr It was, and is, impossit to mark any bounda between pharmaceutic chemistry and the rest

the science. With the extraordinarily rap growth of the number, complexity at importance of chemical substances used medicine many persons are engaged in the preparation and in research upon them would consider themselves organic, physic or technical chemists practising their or branches of chemistry. Nevertheless, would perhaps be reasonable to regard the as being mainly engaged in pharmaceutic chemistry.



Mr. H. Brindle, B.Sc., Ph.C., F.R.I.C.

Training and Examination

Until some twenty years ago the Pharmaceutical Society, in its wisdom, did nofficially recognise pharmaceutical cheristry as a subject which a pharmacist shound be taught, or in which he should be examined. With the reorganisation of the syllabus and examinations in 1935, cheristry as a named subject was finally regated, if that is the correct term to use, the Intermediate course and examinational pharmaceutical chemistry became

pject of both qualifying examinations. inions appear to differ regarding the most table way of teaching the subject, while tainly the practice varies. All possible ferences in the organising of the teaching pear to exist but seem to work satis-On the one hand, as in the torily. armaceutical Society's College, we have whole subject in all its branches and underlying "pure" chemistry taught in Department of Pharmaceutical Chemry, whilst on the other hand we see instiions in which it is controlled and taught the staff of the chemistry department. Manchester we take what might be arded as a middle course. Chemistry and armaceutical chemistry, except in the emist and Druggist course, are separate bjects, taught, with collaboration, in ferent departments of the University, and ming distinct and separate subjects in final examination for the degree in armacy.

e First-year Course

Pharmaceutical chemistry as understood the student for the Chemist and Drugt diploma of the Pharmaceutical Society different from that of the student who reading for a higher qualification. The emist and Druggist course as given by ferent institutions is more or less uniform. e examination syllabus, and the examrs' interpretation of it, considered in njunction with the time available for ching in a one year's course, compel the cher to keep within certain fairly clearlyfined limits. As with the other subjects, is only the above-average student who n be considered as having reached a isfactory standard at the end of his tensive course of one session. Neverthes, the intelligent student receives a good roduction to the subject. His course in ganic chemistry is approximately equal the usual first post-intermediate year of university pass degree. The inorganic emistry which he studies is of a rather ecialised nature in that he is concerned bre with the commercial methods for the oduction of medicinally used chemicals, these affect their purity. In both the ganic and inorganic sections the pharacy student must study particularly the thods for controlling the purity of drugs, say processes and tests for purity entering gely into his course. This is an important int of difference between pharmaceutical emistry and chemistry as it is ordinarily ught. In his practical work his skill must such that his results are of value in assessing the quality or purity of the substance which he is submitting to test.

The Second or Final Year Course

The second or final year's course in pharmaceutical chemistry may be regarded in some particulars as an extension and continuation of the previous year's work. But it is very much more than that. It completes the advanced student's course in the subject and, as these students have varied objectives in view, an attempt is made to arrange as comprehensive a course as the time allotted to the subject will allow. The pure organic and physical chemistry are usually taken to about pass B.Sc. standard. Inorganic chemistry continues to be rather specialised and largely limited to an extension of the first-year course on similar lines. Inorganic medicinal and pharmaceutical substances are considered in greater detail and the field extended by the inclusion of similar knowledge regarding substances used in analytichemistry, particularly that which might be considered as pharmaceutical. In addition, the courses attended include a fairly comprehensive study of synthetic drugs. As an indication of the phenomenal increase in the number of new synthetic drugs which have established themselves in medicine, it may be pointed out that since the publication of the last edition of the British Pharmacopæia in 1932, seven Addenda have been issued, and in these have been included about fifty entirely new synthetic organic drugs. Needless to say, these fifty which have been officially recognised constitute only a very small fraction of the number which may be considered to have been actually introduced in the thirteen years which have elapsed since the Pharmacopæia was published. Enough chemotherapy should be included to fire the student's imagination regarding its possibilities, and his general organic course will include typical reactions which are utilised for the synthesis of medicinals and which have promise as regards still undiscovered compounds.

The physical chemistry included is of about pass degree standard and forms a good introduction to the subject. Some pharmacy students are handicapped in this part of the subject by weakness in mathematics, since the minimum standard required by the Pharmaceutical Society is a School Certificate pass. Most universities demand at least the credit standard for entry to their science faculty, and in some cases all chemistry students are

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expected to have reached the Higher School Certificate standard in this subject. It is almost essential for the successful prosecution of research in any branch of chemistry that a sound mathematical background should have been gained. It is not easy to take up again the study of mathematics when one has halted some years before at a low school certificate standard. The result is that students who were wise enough to proceed well beyond the minimum standard are preferred when the question of research arises. I have not time to deal at any length with the training in practical pharmaceutical chemistry which is received by the final year student. As with the first-year course, emphasis is laid very strongly on analysis.

Undergraduate Courses in the Future

The undergraduate courses in pharmaceutical chemistry are capable of being considerably modified and extended in the future. It is largely a matter of available The first year of the Chemist and Druggist course cannot be altered to any considerable extent whilst it remains a one-year course. Even if it is extended at some future time to two years I should be sorry to see very much subject-matter added to it. In my opinion it would be better to retain the present syllabus in substance, perhaps with a very few additions, and demand a more thorough knowledge of the theoretical work coupled with more experimental work in the labora-If more time becomes available most of it should be spent in the laboratory in becoming familiar in a practical way with the reactions and syntheses of the organic chemicals. The examiner could also demand more knowledge of the manufacturing processes for inorganic chemicals. Possible increases in the subject-matter of a final-year course in pharmaceutical chemistry bristle with difficulties, but they should be considered, since in many schools a further year will be available. Some universities will accept the proposed School Leaving certificate as the equivalent of the Intermediate B.Sc. or B.Pharm. examination, but will demand the usual three years' residence for a degree, thus conferring upon the student the benefit of three years' post-intermediate education. I am not going to attempt to distinguish between the theoretical and the practical work. should be interdependent but, as in the first post-intermediate year course, I should like to emphasise the importance of experimental work in the laboratory.

However limited his opportunities carrying it out, any pharmaceutical chem worthy of the name must have his m directed towards research. No problem too small to be worth someone's attenti-The skilled research worker with elaborate facilities, great resources and possil considerable technical assistance at disposal should not fall into the fai common error of using a steam hamn to crack nuts. There will always be f brilliant or exceptional student, and for h exceptional treatment should be devise I can today deal only with the avera student, or the somewhat above avera since it is usually he who thinks seriously research. We should be prepared to adr at once that, apart from analysis, in whi the field is rather limited, the avera graduate in pharmacy is not well equipp for research in pharmaceutical chemisti I have already indicated that his traini in analysis is at least as good as, and usua better than, that of the honours graduate chemistry. Apart from this one brance however, his course has been so intensi that his knowledge is inclined to be supe ficial, and his manipulative skill not ve good. One year's post-graduate traini in methods of research, such as he usual receives when he proceeds to a master degree, helps considerably in improvimatters, but such training is liable to specialised. The position will be bett when a further year is added to the cours provided that the student who has resear in view has been wise enough to acquire wide an education as possible before cor mencing his course. In most universiti the degree pharmacist can continue wor for the post-graduate research degree M.Sc., Ph.D. or D.Sc., and such wor constitutes a good training for a research career. A still better initial course, which opens out wider and more varied oppotunities in many directions, consists combining the degree in pharmacy with a honours degree in another subject.

Research in Industry

Experience, and therefore training, i research can also be obtained in the researc laboratories of many industrial firm Such experience may differ little from the gained in academic institutions, but on th other hand it may be of a very differen type. It is not the type of research tha governs its quality, but the conception and the work itself. Pure research is under taken with no thought of its application.

ot carried out primarily for any benefit h it may confer upon any individual, munity, or even upon mankind in ral. Industrial or applied research ides specific research and fundamental rch. The first is concerned with probocovering a very narrow field which be peculiar to some particular process boratory. "Fundamental" is a termatimes applied to pure research, but it rhaps better limited to cover the major lems of industry, and is of a long-term re.

nisation of Research

i better man.

nce much research in pharmaceutical nistry involves so-called "pure" chem-, and as no small amount of original carried out by chemists is really maceutical, there is a considerable lap in the subjects and, therefore, in organisation. Pharmacy as a body has in the past done very much in the way rganising or assisting research. ld be exercised in the appointment of the junior and senior staff of the macy school that the successful candiis research minded. As pharmacy hing is constituted at present we cannot d to carry the brilliant researcher who capable of teaching or expounding his ect. But such a person is really a avis. Far commoner is it for the teacher, may be described as moderately essful as a teacher, to be incapable of ying out research because he lacks the ative, energy, knowledge, capacity or e. He should not be appointed, or if pinted in mistake, should make room

esearch scholarships are invaluable. I fairly recently, so far as pharmacists concerned, they were practically nontent, being limited to one or two tenable the College of the Pharmaceutical ety. A few enlightened firms are sing that they can afford to investse the word deliberately—funds in way. I do not wish to particularise, in Mauchester we have three such postuate pharmacy scholarships awarded, hey should be, without any restriction he donors as to the type of work which be undertaken by the scholar. London several, but the number available in rest of the country is lamentably small.

Ol large industrial organisation has rently voted many thousands of pounds p annum for seven years to be devoted to ellowships to foster fundamental rest ch in universities. The recommended

subjects reached the fringe of pharmacy or pharmaceutical chemistry, but stopped short there.

Research degrees stimulate research by offering to the young student what appears to him to be a material reward for his labours. Now that more pharmacists are graduating in universities, pharmaceutical research is sure to expand. May I here be allowed to revert to the subject of the apprenticeship or pupilage which all registered pharmacists are compelled to undergo? If official pharmacy persists in its present policy of insisting on a minimum of two years' pupilage, which is often extended to three or even four years, then it will drive much pharmaceutical research, and incidentally other pharmaceutical work on the manufacturing side, into the hands of non-pharmacists. One would imagine that those entrusted with the furthering of the interests of all pharmacists would realise that already the majority of students are about twenty-one years of age before they can graduate, without having served an apprenticeship. In the near future the average age will be twenty-two. For a research career, or even to undertake occasional research, a further two years' training must be added-twenty-four years of age and an apprenticeship still to be served to become a registered pharmacist! Surely the one year's pupilage after passing a Qualifying examination which I suggested last year is no more than a compromise and can scarcely be argued as a necessity.

Grants in Aid

Grants in aid, if reasonably substantial, assist by making research easier by the provision of financial aid. A research assistant or technician is a boon to the research worker who has teaching or administrative duties to carry out. Academic institutions are not usually able to provide such assistance. This and many other problems can be solved when more funds are available for research. The question is being considered by the Government and an official publication on Scientific Research and Development was issued last year. Is it too much to hope that a body for pharmacy similar to the Medical Research Council could be set up? Some thirty branches of industry have autonomous research associations, financed to some extent by the industry concerned but receiving aid from the Government. The Pharmaceutical Society would appear to devote most of its attention and such funds as it votes for research to its own college.

The fact should not be overlooked that most of the pharmacists who largely finance the Society by the payment of annual registration fees were trained elsewhere and possibly have a greater interest in other schools of pharmacy. The Government proposes greatly to increase its financial assistance to universities, and this should result in a greater share of the cost of the College of the Pharmaceutical Society being shouldered nationally. Then, if not before, the Society should consider ways and means of encouraging research in other schools of pharmacy.

There need be no attempt to suggest subjects for "pure" research. The large research sections of chemistry departments of universities, sometimes with forty or fifty or more research workers, can afford to specialise on pure research, and quite often they are attracted to pharmaceutical chemistry. Departments of pharmaceutical chemistry with their more modest staffing and fewer research students, and also, in general, members of the staffs of pharmaceutical manufacturing firms, usually find themselves compelled to carry out the shorter term fundamental or specific research. The very valuable research list of this Conference will no doubt be published annually again with the return of more normal conditions. When last issued in 1939 it named seventy subjects for investigation, the majority of which concerned with pharmaceutical chemistry.

Effects of Research on Status

The status of the pharmacist depends ultimately on the judgment which the rest of the community passes upon him and his The pharmacist who carries out research is helping in many ways to raise the status of his brother pharmacists as well as his own. His contacts with other research workers in medicine and pure science help to increase the respect in which pharmacy and pharmacists are held, and his work is one justification for our claim that pharmacy is a scientific profession. Martin Arrowsmith's prayer has been quoted before to a pharmaceutical audience and deserves repetition. It is the prayer of the scientist: "Give me unclouded eyes and freedom from haste. Give me a quiet relentless anger against all pretence and all pretentious work and all work left slack and unfinished. Give me a restlessness whereby I may neither sleep nor accept praise till my observed results equal my calculated results, or in pious glee I discover and assault my error.'

WEST HAM MEETING

The forty-fourth annual meeting of the West Ham and Eastern District Association of Pharmacists and fourteenth annu meeting of the West Ham Branch of tl Pharmaceutical Society were held recently Mr. W. H. Cloud, who presided, gave general report of the past years' activitie which had not been curtailed despi enemy air attacks. Mr. Joseph Ref reported that the Association had bee able to donate £75 to the Society's Benev lent Fund; the balance in hand remaine approximately the same as at the beginning of the year, and the Branch had been ab to carry out its programme within the Society's grant. During the previo thirteen years the West Ham Association had been instrumental in sending ov £2,300 to the Benevolent and Orpha Funds. Mr. Stanley Robinson (secretar said membership of the Branch had be in the region of 350, but many pharmacis domiciled in the area were in the Forc or for other reasons not on the Branregister. About twenty student associat and several members of the Association were members of other branches. Visite to West Ham had included Mr. F. V Adams (deputy secretary of the Pharmace tical Society), Mr. J. C. Young, Mr. V Atkinson, Professor H. Berry, Mr. F. Wells, the Society's president, Mr. V Clark (Clerk to the West Ham Insuran Committee), Mr. C. H. Sykes (head pharm cist, London Hospital) and Dr. Fra Wokes. A meeting organised by t Branch and open to all pharmacists h been held at Bloomsbury Square on March to enable Council candidates to addre London members of the Society. Duri the year, members had organised a tes monial to Mr. Joseph Reed, for many year secretary and treasurer to the Associati and Branch; a dinner in his honour to place in November. The president a other members attended meetings of t Romford, West London and North Meti More politan branches during the year.

Officers

The meeting proceeded to elect a comittee of sixteen members; subsequent the following officers were appointe President of Association and Chairman Branch, Mr. Gordon Harris, Ilford; Vipresidents, Messrs. W. H. Cloud, Barki and R. L. Worth, Manor Park; Treasur Mr. Joseph Reed, West Ham; Secreta Mr. Stanley Robinson, 21 Broadhu Avenue, Ilford, Essex.

PHARMACEUTICAL SOCIETY OF IRELAND

It July meeting of the Council of the I rmaceutical Society of Ireland was I on July 10, Mr. C. J. Cremen (presidt) in the chair. Other members of the Council present were Messrs. J. K. Wheleby, P. C. Cahill, T. C. Scott, P. Brookefly, M. Costelloe, W. G. Cunningham, P. Corrigan, T. B. O'Sullivan, F. X. Agher, P. Fullam, P. F. McGrath, C. O'Neill, N. A. McKane and M. Power.

Crespondence

letter was read from the Department Local Government and Public Health ng that Mr. P. C. Cahill had been ointed a member of the Therapeutic stances Advisory Committee. A letter Dr. F. C. Hamilton, M.P.S.I., 37 folk House Road, Streatham, London, 1.6, intimated that he had been apted physician and surgeon to His erial Majesty Haile Sellassie, Emperor byssinia, and requesting to be furnished a letter setting out that he had been ted a life member of the Society. On motion of THE PRESIDENT, seconded by WHELEHAN, it was agreed to have the of the Society affixed to a letter stating Dr. Hamilton had been elected a life iber.

r. P. C. Cahill wrote enclosing Benevo-Fund subscriptions received through Irish Chemists' Golfing Society, as ws: Irish Chemists' Golfing Society, 5s.; Mr. T. C. Slowey, Henry Street, lin, £3 3s.; Mr. P. D. Larkin, M.P.S.I., gheda, £3. The Council adopted resons expressing its grateful thanks to Irish Chemists' Golfing Society, Messrs. C. Slowey and P. D. Larkin for their rous subscriptions.

Ristration and Membership

he following changes of address were fied: Dr. F. C. Hamilton, M.P.S.I., 37 Norfolk House Road, Streatham, don, S.W.16; Mr. D. Roice, M.P.S.I., 90 Main Street, Gorey, co. Wexford; J. Coffey, L.P.S.I., to I Belfast Road, gor, co. Down.

he following who submitted certificates of granted Preliminary registration: sees A. Clarke, M. J. Cooke, E. M. nelley, M. A. Nolan and Messrs. P. M. rin and T. Walsh. The Licence certifiof Miss Angelina Gabriel McCarthy signed and sealed.

he following were elected members of Society: Messrs. V. Boyd, H. Hughes,

J. Lenihan and J. Ryan. The following were nominated for membership: Miss P. Hans, c/o 66 Patrick Street, Cork, and Dr. J. B. Maher, Slaneyville, Tullow, co. Carlow.

The reports of the House, Law, Schools, and Certificates and Declarations Committees were submitted and adopted. The last-named committee reported that forty-five candidates had entered for the July Licence examination; fifty-three candidates had entered for the Assistants' examination.

At a meeting of the Benevolent Fund held following the Council meeting a number of grants were passed for payment.

A NEW SCARCE SUBSTANCES ORDER

The Ministry of Health announces that a new Scarce Substances Order will shortly be published revoking in its entirety the 1941 Order (S. R. & O., No. 273) wherein authorised alternatives were provided for four salts of potassium, and amending the 1942 Order (S. R. & O., No. 709) by omitting twenty of the twenty-seven spirits and tinctures scheduled there as scarce substances. The Gentian Order (No. 1345 of 1943) and the Ipecacuanha Order (No. 795 of 1944) continue in force, and the Cinchona Products Order continues to control the use of tinct. cinchon. and tinct. cinchon. co.

The net result of the amended Scarce Substances Orders is that eleven galenicals remain scheduled as scarce substances, namely, spirit. ammon. aromaticus, spirit. chloroformi, spirit. menthæ piperitæ, tinct. aurantii, tinct. capsici, tinct. limonis, tinct. zingib. mit., inf. gent. co. conc., inf. gent. co. recens, extract. ipecac. liq., and tinct. ipecac. The National War Formulary uses ten of the authorised alternatives which were named in Order 709 but which have been omitted in the new Order as ingredients of formulary preparations, and these preparations will continue to be dispensed according to the N.W.F. The pharmacist is thus left with stocks of the authorised alternatives for six other tinctures, and of these tinct. valer. ammon. conc. and tinct. card, co. conc. are the only ones which are commonly used and of which he may hold much stock. This advance notice is given by the Ministry of Health in order that both pharmacists and wholesale houses may have time to use up such stocks. The Order will not come into operation until November 1. (Editorial comment, p. 67.)

SCIENCE PAPERS AT THE CONFERENCE

The following are summaries of two of the science papers submitted at the annual meeti of the British Pharmaceutical Conference on July 18

The Assay of Alkaloidal Galenicals Using the Chromatograph

Part I. Preparations of Belladonna, Stramonium and Nux Vomica

By G. W. Brownlee

THE application of the chromatograph as a prelude to the assay of various alkaloidal galenicals, prepared according to the method of the German Pharmacopeia, has been shown by Merz and Franck, Valentine, and Valentine and Franck, to be useful as an indication of the identity of the preparation, and in some cases as a suitable method of simplifying alkaloidal assays. Since the mode of preparation, assays and pharmacopœial requirements of the various alkaloidal galenicals differ in the German and British Pharmacopæias it was decided to determine how far the chromatograph could usefully be applied to identification and analysis of official and commercial preparations. The quantities used in the assays were those which could be conveniently used in orthodox analysis.

Simple Apparatus

The apparatus used was simple and consisted of a glass tube 60 cm. in length with an internal diameter of 1.30 cm. Into one end of this tube was inserted a rubber bung through which was passed a tube 8 cm. in length and 8 mm. in diameter. The flask used was marked at 30 and 40 mils and attached to a water pump. The adsorbent used in these processes was alumina and was packed in the tubes in the following manner. A small piece of cotton wool was first placed in the tube and pressed down with a wooden rod I cm. in diameter flattened at the end; 50 gm. of alumina was introduced 5 gm. to 8 gm. at a time and pressed down evenly with the rod. After each quantity had been pressed down it was found convenient to tap the side of the tube to avoid a series of rings showing where each fresh portion had been added. The length of the column of alumina was about 37 cm. On top was placed a piece of filter paper cut to size and moistened with the particular galenical menstruum to be used, e.g. alcohol (40 per cent.) when liquid extract of stramonium was being assayed, or alcohol (70 per cent) when liquid extract of belladonna was being used. In some cases a small plug of cotton wool, suitably moistened, was more convenient, e.g. preparations of nux vomica and soft ex-

tracts generally. The residues in the case belladonna and stramonium compar favourably in colour with those from office assays.

Various belladonna and stramonii preparations (both official and commerci were examined. The assays were carr out in such a way that the alkaloidal re dues from the official and chromatogra processes were heated at the same time the same oven to a constant weight. Gale cals of hyoscyamus were found to be unsat factory for the process, primarily becar of their high extractive and low alkaloid content.

It has been found in practice that what the the assay of the British Pharmacope for liquid extract of nux vomica has be applied, emulsions which are difficult separate have been occasionally formed

It was decided to try the chromatogra as an alternative process. The meth adopted was similar to that applied the belladonna and stramonium prepa

In their investigations Merz and Franchis titrated the liquid which came from 1 chromatograph and thus obtained the to alkaloids. For two reasons, however, to take method cannot be applied here. Fire blan because total alkaloids are not required by the official assay. The second and me stin important reason is that a certain alkalin hat is carried down from the alumina and results for total alkaloids by direct titrat are not in agreement with those obtain by extraction. This applied to both typ ind of alumina used. It was decided to try direct estimation of strychnine in n item vomica preparations by chromatographi the neutralised product of preparation which have been treated directly w nitric acid in the presence of sulphuric ac The results were in good agreement w theoretical figures and B.P. assay, and t residues obtained were comparable colour with those obtained in the office of assay.

Two types of alumina were used in the assays, type A, which was standardis according to Brockmann, and type which was 100- to 200-mesh power and specially suited to chromatographic work.

Comparisons were made of the suitability of the two types for analytical use; some of these results are given in the table below:—

COMPARISON OF TWO TYPES OF ALUMINA

Preparation	Type A alkaloid	Type B alkaloid
extractum belladonnæ liquidum ,, nucis vomicæ ,, ,, stramonii ,,	per cent. 0.705 1.490 0.247	per cent. 0.705 1.498 0.247

It will be osberved that there is no lifference, so far as the alkaloidal assays are concerned, between the two types. The chromatograph of the type A is usually lightly better defined than that of the type B. In this case of preparations of nux romica which had been directly treated

with sulphuric acid and nitric acid, type B was found to give in the conditions of working a cleaner liquid than type A.

The use of chromatographic methods in the assay of preparations of belladonna, stramonium and nux vomica shows that the analytical results obtained compare favourably with those arrived at by official methods. With preparation of belladonna and stramonium a liquid is obtained for analysis which is much cleaner than that obtained by the official method, and the resulting assay is free from complications due to the formation of emulsions. alkaloidal residues obtained are comparable in appearance with those of the official assays. The chromatographing of the nux vomica preparations results in a liquid which is easy to manipulate and readily extracted by chloroform without emulsification.

(From the laboratories of Evans Sons Lescher & Webb, Ltd., Liverpool).

Tests for Acetone and Ethyl Alcohol with Special Reference to Methyl Alcohol

By G. J. W. Ferrey, B.Sc.

N this paper the author describes experiments to show that the B.P.C. tests for imits of ethyl alcohol and of acetone are ncompatible, i.e. that methyl alcohol ontaining insufficient acetone to give a riolet coloration with Legal's solution may ontain enough to give a turbidity or preipitate in the iodoform reaction for ethyl Icohol. The B.P.C. requirement for the iolet coloration makes the test less lelicate, but if any difference in colour from he blank is the criterion the test becomes nore sensitive and agrees with the statenent in Allen's Commercial Organic Analyis that the test will show the presence of .05 to 0.10 per cent. of acetone. Mr. Ferrey uggests that the Codex tests for limit of cetone in methyl alcohol, isopropyl alcohol nd industrial methylated spirit (acetone ree) should be replaced by one based on he reaction of acetone with Nessler's eagent. This last gives a very insoluble olloidal precipitate with traces of ketones nd aldehydes. The following detailed lirections are given for methyl alcohol. Dilute I mil with water to 50 mils and dd to the product 5 mils of alkaline olution of potassio-mercuric iodide; the urbidity at the end of five minutes is not reater than that produced by similarly reating I mil of a 0.05 per cent. v/v olution of acetone in water. If a lower mit than 0.05 per cent. v/v is to be mposed, the amount of the sample taken

may be increased, as the solubility of the complex and its rate of formation is not influenced by a small amount of alcohol. The author also recommends this test in place of the indigotin reaction of Adams and Nicholls as a limit list for acetone in industrial methylated spirit (acetone free).

On the sensitivity of the iodoform test for ethyl alcohol given in the Codex, the author prefers the formation of a colour or precipitate as better than relying on the odour of iodoform. The U.S.P. test which requires absence of colour and turbidity will not detect less than 3 per cent. even after thirty minutes' heating. The following test suggested for the Codex gives a marked turbidity with 10 mgm. of ethyl alcohol in a few minutes. To 5 mils add 25 mils of water, 25 mils of solution of sodium hydroxide and 25 mils of N/10 iodine. Heat on water bath at 39° to 41° for not more than ten minutes with constant shaking. The test gives crystalline precipitates.

Since acetone also reacts to form iodoform quickly whilst ethyl alcohol is only slowly attacked at room temperature, it is suggested that any acetone present may be decomposed first and the precipitate filtered off; the test for ethyl alcohol is then applied. By this modification the test is more sensitive for ethyl alcohol because the solution already contains some dissolved iodoform.

(From the laboratories of James Woolley, Sons & Co., Ltd., Manchester).

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TRADE REPORT

Spot quotations for pharmaceutical chemicals, crude drugs and essential oils represent the prices for wholesale quantities of standard quality. C.i.f. quotations do not include marine war risk insurance and other abnormal charges payable in the present emergency marine war risk insurance and other abnormal charges payable in the present emergency

28 Essex Street, W.C.2, July 18

THERE is not much change to report in the general position of the drug and chemical markets. A considerable number of inquiries is reaching London, but little business has yet been done in this direction. A substantial increase in imports will be required before the stock position reaches a level sufficiently high to meet current demands. With one or two minor exceptions, prices are maintained at about the levels that have been recorded in recent issues. The only important alteration in PHARMACEUTICAL CHEMICALS concerns CAF-FEINE, prices of which have been advanced as from July 16 because of higher costs of production. Buyers are reminded that business is subject to the approval of the Directorate of Medical Supplies.

Crude Drugs

The home trade in Crude Drugs is at the low level generally experienced at this time of year. Prices are about unchanged on the week. Some business is reported in Curação Aloes for prompt shipment, but Cape is still unobtainable. Little change has occurred in the position of ANTIMONY, and current business is about up to the level of home smelters' capacity. As noted last week, small supplies of Balsam tolu are expected shortly. Supplies of Buchu Leaves may be obtained on spot. Cardamoms is quiet and neglected. A parcel of CASCARILLA QUILLS is reported just shipped. The recent rise in CLOVES appears to have been halted; and the article is now quieter. Small quantities of Chinese Menthol are stated to be available at a price just above that wanted for Brazilian. Nutmegs are in short supply, and prices are tending upwards. The price of QUILLAIA BARK has hardened, following reports that exports from Chile have been prohibited. Odd lots of Rhubarb are being sold at a comparatively high price. Turmeric is dearer ex Liverpool.

No price changes have been notified for ESSENTIAL OILS under Ministry control, and stocks of oils outside the Control are negligible. The Ministry of Food announces that there will be no change in the prices of refined oils and imported edible animal fats allocated to primary wholesalers and large trade users during the eight-week period July 22 to September 15.

Pharmaceutical Chemicals

ACETANILIDE.—Crystals and powder are un changed at 2s. 5d. and 2s. 6d. per lb.

ALLOBARBITONE.—Steady at 60s. per lb.

Boric Acid.—Current rates per ton are a follows: B.P. quality, granulated, £60; crystal £61; powder, £62. Commercial grades, £8 per ton less. Packed in one-cwt. bags, delivered carriage paid in Great Britain in one-ton lot: and upwards.

CAFFEINE AND SALTS.—As a result of higher powt. costs of production, prices have been advanced as from July 16. Caffeine and salts remain under control of the Ministry of Supply, which mus give consent before any order can be executed The new schedule is as follows (prices per lb.):-

	56 lb. to r cwt.	28 lb. to 56 lb.	7 lb. to 28 lb.	Smalls
Alkaloid, B.P. Alkaloid, anhyd. Benzoate Citrate, B.P.C. Hydrobrom, B.P.C. Sod. benz., B.P. Sod. iodid. Sod. sal., B.P.C.	s. d.	s. d.	s. d.	s. d.
	37 0	38 0	39 0	40 0
	40 0	41 0	42 0	43 0
	25 9	26 9	27 9	28 9
	23 6	24 6	25 6	26 6
	38 0	39 0	40 0	41 0
	23 6	24 6	25 6	26 6
	28 9	29 9	30 9	31 9
	24 3	25 3	26 3	27 3

Tins charged extra when supplied.

CITRATES—Makers' prices per lb. are as follows: Potassium, in 28 lb.-r-cwt. lots (containers in brackets): 3s. 6½d (r-lb.); 3s. 5d. (4-lb.); 3s. 4d. (7-lb.); 3s. 3½d. (14-lb.); 3s. 3d. (28-lb.); Iron and ammonium (scales) B.P., is at 2d. per lb. above, and Sodium is al 3d. per lb. below these prices. Potassium and Sodium powder, one penny per lb. extra.

MAGNESIUM TRISILICATE.—Home market prices per lb., for quantities of 28 lb.—1 cwt. market are as follows (containers in brackets): 5s. 9d (1-lb.); 3s. $7\frac{1}{2}$ d. (4-lb.); 3s. $6\frac{1}{2}$ d. (7-lb.); 3s. 6d (14-lb.); 3s. $5\frac{1}{2}$ d. (28-lb.). Prices net one month

Mandelic acid.—In good demand; I lb. 22s. per lb.; 4 lb., 20s. 3d.; 7 lb., 18s. 6d. 14 lb., 16s. 9d.; 28 lb., 15s. Sodium and calcium salts are at the same prices.

PILOCARPINE.—Makers quote at the following rates per oz.: Base, 1 oz., 27s.; 4 oz., 21s. 3d. 8 oz., 20s. 9d.; 25 oz., 20s. 3d. Nitrate, 1 oz., 18s. 6d.; 4 oz., 18s.; 25 oz., 17s. 6d.

Salicylic acid.—Quoted per lb. as follows. 2s. 4d. (14-lb.).

TERPINEOL.—Pure medicinal quality is available at from 3s. 3d. to 4s. per lb. for use in antiseptics of the chloroxylenol type;

Crude Drugs

ALOES.—Some business is reported done in ração for prompt shipment. Landed price ill be in the region of 320s. to 325s. per cwt. ape, unobtainable.

Antimony.—Business is steady at unchanged ices. English minimum 99 per cent. regulus, 12 10s. per ton, delivered; crude, 70 per cent., 0.

Balsams.—*Peru* continues to be quoted at . per lb. and *Canada* at 11s. 6d. Small supplies *Tolu* are expected.

Belladonna.—English herb is quoted at . 6d. per lb. Indian root, testing o 25 per

nt., would be worth 2s. 3d. per lb.

BISMUTH.—Metal is steady at 6s. 3d. per lb. r 5-cwt. lots.

Buchu leaves.—Spot, 5s. 3d. per lb.

CARDAMOMS.—Aleppy greens may be had on of at 5s. 6d. per lb., and Aleppy seed at 6s. 3d. CASCARILLA.—A parcel of quills is reported st about to be shipped; spot price will be proximately 3s. per lb., landed.

CLOVES.—Quieter. Zanzibar, spot, is. 9½d. r lb., sellers.

COCHINEAL.—Silvers are offered on the spot 6s. per lb.

DIGITALIS LEAVES.—Portuguese, spot, 140s. r cwt.; English, 2s. 6d. per lb.

Ergor.—Remains scarce. Good-quality aterial, if available, would be worth 6s. 6d. r lb.

GINGER.—African, spot, 85s. per cwt.

Gum Acacia.—Kordofan cleaned sorts, spot, s.; bleached, 175s.; Talha, cleaned, 47s. 6d. Henbane.—Current prices are as follows: dian, 230s. per cwt.; Russian, 325s.; Egyptian uticus), 75s.

JALAP.—Material testing about 12 per cent., 6d. per lb., spot; 10·1 per cent., 3s.

KAMALA.—Material testing 6 per cent. ash priced at 2s. 6d. to 2s. 9d. per lb., on spot.

Liquorice Root.—Turkish, afloat, 85s. per t., landed, for pharmaceutical purposes only.

MENTHOL.—Brazilian, spot, 82s. 6d. per lb. dd lots of Chinese are reported offered at s. 6d.

MERCURY.—Official quotations range from 8 ros. to £69 rfs. per flask, according to nditions and quality, with higher prices for aller lots and redistilled grades.

Myrrh.—Fair Aden sorts continues to be allable on spot at £16 per cwt.

Nutmegs.—In short supply. West Indian, and unassorted, spot, 2s. 10½d. per lb.; ormy and broken, 2s. 9d.

Nux vomica.—Cochin, spot, 37s. 6d. to 40s. r cwt.; shipment, 31s. to 32s., c.i.f.

Pepper.—Whole, not picked over or cleaned, sale to processors, is officially priced at 4d. per lb. for white and 1s. per lb. for black.

Quillaia bark.—It is reported that export from Chile has been prohibited. As a result the market has hardened and spot prices are now as follows: Natural, 80s. per cwt.; cut, 105s.; crushed, 95s.; powdered, 95s.

Rhubarb.—Odd cases of rough-round are occasionally turning up and being sold at about 22s. per lb.

Senna.—Alexandrian hand-picked pods are scarce; price nominal at 4s. per lb. Good manufacturing Alexandrian pods, 2s. per lb. Tinnevelly pods and leaves are unchanged.

STRAMONIUM LEAVES.—Quoted by dealers at 80s. per cwt. on spot.

Strophanthus.—About 7s. 6d. per lb. would be wanted for Kombé seed on spot.

Tragacanth.—Medium grades are quoted as follows: No. 1, white, £130 per cwt.; No. 2, white, £115; No. 3, white, £100; No. 4, white, £85; pale leaf, £60; amber leaf, £50; dark amber, £40; brown leaf, £30; red-and-brown leaf, £25; red leaf, from £20; hoggy, £12 to £15.

Turmeric.—Madras finger, sound quality, spot, 75s. per cwt., Liverpool.

Waxes.—Bees'.—Prices of crude for the home trade were given in the C. & D., June 2, p. 570. Carnauba.—Fatty grey, spot, 490s.; chalky grey, spot, 480s.; prime yellow, spot, 590s. Ouricuri.—Spot, 310s. to 320s., according to impurities; shipment, 285s., c.i.f.

Essential and Expressed Oils

Castor.—Bulk supplies are officially quoted as follows: "Firsts," £82 per ton, "seconds," £80, both naked ex works.

Clove.—No change in English distillers' prices at 12s. 6d. to 13s., as to quantity.

CORIANDER.—English-distilled is offered at about 180s. per lb.

Cottonseed.—Controlled prices for bulk supplies are as follows: Crude, £52 2s. 6d.; washed, £55 5s.; refined edible, £57; refined deodorised, £58 per ton; all varieties are quoted naked ex works.

Nutmeg.—English oil, in small supply, about 45s. per lb.

OLIVE (EDIBLE).—The price charged to the wholesaler by the importer is 25s. 9d. per gallon, ex store. Prices charged by wholesalers to retailers are agreed by the Ministry of Food as follows: 33s. 6d. per gallon, in 1-gallon loan cans; 34s. 3d. per gallon, in ½-gallon loan cans; 35s. per gallon, in 1-quart loan cans; 36s. per gallon, in 1-pint loan cans.

Pimento berry.—Small quantities of English may be obtained at about 8os. per lb.

Rapeseed.—Unchanged at £88 per ton.

Manchester Pharmaceutical Association.— The Association's Sunday ramble on July 29 will be to Bollington, Kettleshulme and Chinley. Ramblers should meet at London Road Station at 9.20 a.m., booking to Bollington (return).

TRADE MARKS

(From "The Trade Marks Journal," June 20) Jennifer Graham" (facsimile signature); for skin preparations, cosmetics, toilet prepara-tions (3). By Sandora, Ltd., Waxwell Farm

House, Pinner, Middlesex. B631,088.

"Filmett"; for perfumery, cosmetics, toilet preparations (3). By L. C. Mote, 5 Crescent Way, Orpington, Kent. 632,403.

"Country Life"; for perfumes, preparations

for the hair, cosmetic preparations for the face and legs (3). By Delavelle (G.B.), Ltd., 38–46 Orsman Road, Kingsland Road, London, N.1. 632,479. "PAN-PAK"; for toilet and cosmetic prepara-

tions (none consisting of or containing soap), excluding toilet cleaning preparations (3).

By Tokalon, Ltd., 356 Oxford Street,
London, W.I. B632,818.

"REVELO"; for perfumery, cosmetic and toilet

preparations, and sachets for waving the hair (3). By Lennard, Lee-Narvill & Co., Ltd., 216 Anlaby Road, Hull. 633,145.

"PIN-UP GIRL"; for perfumery, toilet and cosmetic preparations and soaps (3). By Mylord Products, 164 Stanway Road,

"Jensano" and "Dysano"; for sanitary preparations and substances; disinfectants (5). By Ibbetson & Co., Ib-co Works, Great North Road, Stevenage, Herts. 631,748 and

632,752.

Device of a nurse; for toilet paper and paper handkerchiefs (medicated) (5); (non-medicated) (16). By H. Wesley, Ltd., Harlesden Stationery Mills, Acton Lane, London, N.W.10. 632,587-88 (both Associated).

"Virs"; for yeast tablets, being pharmaceutical tonic preparations (5). By J. H. Robson & Co. (Manufacturing Chemists), Ltd., Tynevale Works, High Street, Newburn-on-Tyne. B632,651.

"CORIODONE"; for pharmaceutical preparations for use in radiography (5). By May & Baker,

Ltd., Dagenham, Essex. 632,803.

"MINACRINE"; for pharmaceutical prepara-tions (5). By Boots Pure Drug Co., Ltd., Station Street, Nottingham. 633,045 (Associated).

"Overplas"; for antiseptic medical and surgical dressings (5). By Solidol Chemical, Ltd., Ashmead Works, Disney Street,

London, S.E.1. 633,102.

"MASTAMIDE"; for pharmaceutical preparations containing amides, and pharmaceutical substances being amides (5). By Day, Son & Hewitt, Ltd., 22 Dorset Street, London, W.1.

633,577.

"Phardis" (in cross device, with colour restriction); for pharmaceutical preparations for internal human use (5). By Pharmaceutical Distributors (Glasgow), Ltd., 187 St. Vincent

Street, Glasgow, C.2. 633,590.
"Krinka"; for pharmaceutical preparations and substances (5). By Ashe Laboratories, Ltd., 120–22 Victoria Street, London, S.W.I.

634,146. "Zonalin"; ONALIN"; for dental fillings and lining materials (5). By Associated Dental Products, Ltd., Cricklade Road, Purton, nr.

Swindon. 634,318. "Sescopak"; for devices for giving hypodermic injections (9). By Surgical Equipment Supplies, Ltd., Westfields Road, North Acton, London, W.3. 632,775.

"Luxanise"; for all goods (24). By H. Franc & Lauder, Ltd., 4 Chepstow Street, Manchester, I. 635,040.
"CASCELLOID"; for hair curlers, hair clips, etc.

(26). By Cascelloid, Ltd., Britannia Works, Abbey Lane, Leicester. 634,052 (Associated).

(From "The Trade Marks Journal," June 27) "Milacto"; for chemical substances for preserving milk (1). By Manx Chemical Co., 106 Heath Road, Penketh, Warrington,

Lancs. 631,372.

"Frossol"; for anti-freezing preparations (1).

By A. G. Carr, 7 Newlay Wood Avenue,

Horsforth, nr. Leeds. 634,268.

"Lustron"; for sachets for use in waving the hair (3). By Sales Affiliates, Ltd., Elstree Way, Boreham Wood, Herts. B628,914 (Associated).

"MARY DUNHILL"; for cosmetic and toilet preparations and perfumery (3); powder puffs (21). By Mary Dunhill, Ltd., 30 Duke Street, St. James's, London, S.W.1. 629,281–82 (Both Associated).

"Invicta"; for cosmetics, toilet preparations, soapless shampoo, etc. (3). By Delayelle (G.B.), Ltd., 38-46 Orsman Road, Kingsland Road, London, N.I. 632,480.
"Modee"; for essential oils, tooth-paste,

shaving-cream and hair-cream (3). By Mody & Co., Ltd., 312 Deansgate, Manchester. B632,852. "Votylar"; for perfumery, toilet and cos-

metic preparations, dentifrices (3). By L. Scherk, 47 Carlyle Mansions, London, S.W.I. 634,178 (Associated). chemical

"STERAGLASS"; for preparations for cleaning and polishing glass (3). By Knight's Oil & Chemical Co., Ltd., 77, 79 and 89 Lancaster Street, Birmingham, 4. 634,832.

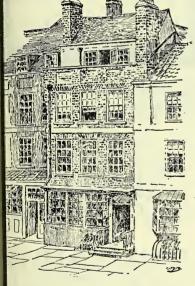
"PINEWAFT"; for pharmaceutical preparations (human and veterinary), sanitary prepara-tions, disinfectants, all containing pine extract (5). By Midland Oil Co., Ltd., 85 Clifford Street, Birmingham, 19. B632,929.

"VANDUARA"; for pharmaceutical substances (5). By J. Logan & Co., 16–18 Niddry Street, Paisley, Scotland. 633,878 (Associated). "Benzaesthaine"; for analgesic and anæs-

thetic pharmaceutical preparations (5). By Bayer Products, Ltd., 14 Waterloo Place, Pall Mall, London, S.W.1. 633,984.

Closed on Saturdays.—Advertisers and subscribers are reminded that owing to war conditions the Head Office of The Chemist AND DRUGGIST, 28 Essex Street, London, W.C.2, is closed on Saturdays until further notice. Urgent instructions relating to advertising and subscriptions should be sent to the C. & D., 17 Argyle Street, Bath, Somerset.

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Phenoxetol is very effective in pyocyanea infections of burns or superficial wounds. It is especially useful in the preparations of surfaces for skin grafting associated with Ps. pyocyanea, and may also be used together with Penicillin in solutions and creams.

References: Lancet 1944, 247, 175 and 176. Original bottles—100 cc., 250 cc., 500 cc., 1,000 cc

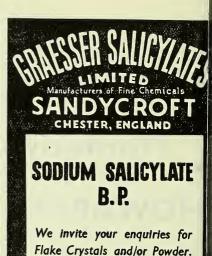
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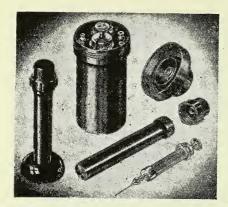
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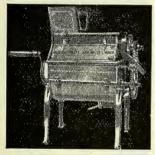
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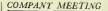
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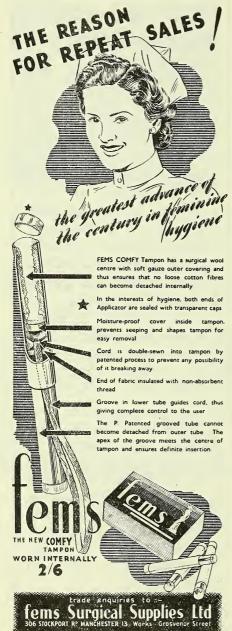
At the recent Annual Meeting of M. Caltho Co., Ltd., held at their Ossett Office, Mr. Calth the course of his speech said: "We have I foundation for a national company and, now it war has been brought to a successful conclus restrictions on supplies are easier, we can forge a still greater achievements until we have a turn in excess of our present sales.

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1945

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PHARMACIST required as Branch Manager (no PHARMAVISI required as Branch Manager (no Sunday or half-day duty). Salary according to Co-operative Pharmacy Scale. Applications, stating age, experience, etc., to The General Manager, Abersychan and Pontypool Co-operative Society, Ltd., Hanbury Road, Pontypool, Mon.

DHARMACIST (male or female) wanted, with experience to manage business in Classer and

PHARMACIAL (male or temale) wanted, with experience, to manage business in Glasgow area. Applications in writing, giving full particulars and endorsed "B/M," should be forwarded to Scottish Co-operative Wholesale Society, Ltd., Retail Drug Department, 187 Bogmoor Road, Shieldhall, Glasgow S W 1

gow, S.W.I.

PHARMACIST to take charge branch pharmacy. Good residential area London. Living accom-ation. Permanency. Apply 615/172, C. & D. modation. Pe

QUALIFIED Manager required for Branch Pharmacy at Bramley, Leeds. No Sunday of half-day duty. One assistant. Permanency. State age, experience, salary, etc. W. A. Wharrann, Ltd., 27 Eastgate, Leeds, 2.
QUALIFIED Branch Manager required (permanency) for a well-established Pharmacy, good wages and working conditions: up Sunday of

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WEYBRIDGE. Manager or Locum, Unqualified, end July. Good-class dispensing, etc.; lock-up shop. Good wages and commission to sultable applicant. Ashworth, Church Street, Weybridge.

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COUNTER Hand (man or woman) with some experience of Drugs required by leading London House, Good wages and good hours, Reply with the usual particulars and wages required to 617/250, C. & D. London Office, CUXSON, GERRARD & CO., LTD., Oldbury, require the services of a Representative with a live connexion to cover their interests to Chemists and Drug Stores in industrial Yorkshire and North East England. Full particulars by letter in the first instance. instance

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Application forms not provided. Male candidates should state position with regard to military service. Closing date, 28th July, 1945.

A SSISTANT PHARMACIST required by MIDDLESEX COUNTY COUNCIL at HILLINGTON COUNTY HOSPITAL, NR. UXBRIDGE, Middlesex. Candidates must hold one of Pharmaceutical Society's qualifications. Commencing salary £250 p.a. Increments of £10 up to £300 p.a. considered annually. War bonus (now £60 p.a.). Unestablished staff. Wholetime duties under Medical Director. Application, stating age. qualifications, and experience, enstating age. qualifications, and experience. time duties under Medical Director. Application, stating age, qualifications, and experience, enclosing up to three recent testimonials to Medical Director "24" of Hospital. Application forms not provided. Male candidates should state position with regard to military service.

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SOUTHEND MUNICIPAL HOSPITAL ROCHFORD, ESSEX
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Application forms, which can be obtained from

Application forms, which can be obtained from the Medical Superintendent of the hospital, must be completed and returned to him as soon as

possible.

H. J. WORWOOD

Town Clerk. June, 1945. HERTFORDSHIRE County Council E.M.S.

Harry Education and Education and Education Base Hospital, Hempstead House, Hemel Hempstead. Pharmacist in Charge (non-resident). Applications are invited from duly qualified ladies and gentlemen. Salary £325 per quanted ladies and gentlemen. Salary £322 per annum, rising by annual increments of £12 10s. to £375 per annum, plus cost of living bonus, now 15s. 6d. a week for women and 19s. for men. Assistant Dispenser kept. Applications with full particulars of age, nationality, qualifications and experience, together with copies of two recent testimonials, should be sent to the Medical Superintendent Superintendent.

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Salary at the rate of £250 per annum.

The post is designed for a junior person who will also undertake some research work or advanced studies.

Applications, giving full particulars of age, training, qualifications and experience, etc., together with the names and addresses of three referees, should be forwarded to the undersigned not later than the 18th August, 1945. W. THOMPSON,

Director of Education. Education Offices, Direct 15 John Street Sunderland.

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